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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,903

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Yoshiyuki Tani

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EXAMINER

OSELE, MARK A

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,903	<b>Applicant(s)</b> TANI ET AL.	
	<b>Examiner</b> Mark A. Osele	<b>Art Unit</b> 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 9-22-10.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Japanese Patent Publication 9-197394 (Akira et al.) in view of Frederick (U.S. Patent 4,373,611), Mizutani et al. (U.S. Patent 6,258,666), and Japanese Patent Publication 2003-150093 (Hiroyuki et al.). Akira et al. shows a method for peeling a film from a display panel comprising: peeling off an end of a film (element 1) that has been stuck on a display panel (element 2); fixing the peeled end of the film to a roller (element 4) that is adjacent to or in contact with a panel face of the display panel; and peeling off the film from the display panel by rotationally driving the roller (English Abstract and partial translation). Akira et al. fails to show an internal motor for the roller.

Frederick teaches that a roller can be driven by either an internal or external motor (column 1, lines 23-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the external motor of Akira et al. with an internal motor because Frederick teaches the two to be functionally equivalent alternate expedients. The references as combined fail to show the contact plate.

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Mizutani et al. shows a peeling roller for removing a film from an electronic substrate wherein a roller, 5, and a contact plate, 6, are pressed by a mechanism to sandwich the film, 4, therebetween (See Figs. 1, 10b, 10c; column 3, lines 26-35; column 4, lines 15-22; column 5, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the adhesive patches of Akira et al. with the contact plate of Mizutani et al. because Mizutani et al. shows the contact plate to be a functionally equivalent alternate expedient to the adhesive patches with the advantage that the film will not be contaminated with adhesive (column 3, lines 36-39).

Hiroyuki et al. teaches that a contact plate holding a sheet onto a roller for delamination from a substrate is preferably curved to match the outer circumferential surface of the roller (paragraph 0016). It would have been obvious to one of ordinary skill in the art at the time of the invention to make the contact plate of the references as combined with an arc shaped cross section with the same curvature as the roller because Hiroyuki et al. shows that this preferable shape holds the sheet against the roller for the entire length of the contact plate which would have a stronger holding force than a flat contact plate only touching the roller at a tangent point.

Regarding claim 3, Akira et al. also show the roller to have an effective length longer than the short side of the display panel.

Regarding claim 9, Akira et al. teaches that a transport pallet, not shown, is used to transport the display panel perpendicularly past the roller (paragraph 0016).

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3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Stadtmueller (U.S. Patent 5,891,297) in view of Frederick (U.S. Patent 4,373,611), Mizutani et al. (U.S. Patent 6,258,666), and Japanese Patent Publication 2003-150093 (Hiroyuki et al.). Stadtmueller shows a method for peeling a film from a display panel comprising: peeling off an end of a film (element 28) that has been stuck on a display panel (element 32); fixing the peeled end of the film to a roller (element 22) that is adjacent to or in contact with a panel face of the display panel; and peeling off the film from the display panel by rotationally driving the roller (column 3, lines 48-66, column 4, lines 40-47). Stadtmueller et al. fails to show an internal motor for the roller.

Frederick teaches that a roller can be driven by either an internal or external motor (column 1, lines 23-26). It would have been obvious to one of ordinary skill in the art to add a motor to the invention of Stadtmueller to reduce the effort required of an operator and Frederick teaches that making the motor either internal or external is a mechanical design choice. The references as combined fail to show the contact plate.

Mizutani et al. shows a peeling roller for removing a film from an electronic substrate wherein a roller, 5, and a contact plate, 6, are pressed by a mechanism to sandwich the film, 4, therebetween (See Figs. 1, 10b, 10c; column 3, lines 26-35; column 4, lines 15-22; column 5, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the groove of Stadtmueller with the contact plate of Mizutani et al. because Mizutani et al. shows the contact plate to be a functionally equivalent alternate expedient to the groove with the advantage that the film will not be secured without the chance of slipping out of the groove.

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Hiroyuki et al. teaches that a contact plate holding a sheet onto a roller for delamination from a substrate is preferably curved to match the outer circumferential surface of the roller (paragraph 0016). It would have been obvious to one of ordinary skill in the art at the time of the invention to make the contact plate of the references as combined with an arc shaped cross section with the same curvature as the roller because Hiroyuki et al. shows that this preferable shape holds the sheet against the roller for the entire length of the contact plate which would have a stronger holding force than a flat contact plate only touching the roller at a tangent point.

Regarding claim 3, Akira et al. also show the roller to have an effective length longer than the short side of the display panel.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Akira et al. or Stadtmueller in view of Frederick, Mizutani et al., and Japanese Patent Publication 2003-150093 (Hiroyuki et al.) as applied to claim 3 above, and further in view of McQuiston. The references show the claimed subject matter except for the toggle clamps. McQuiston shows an apparatus with a bar, 36, for rolling up a strip of material, 20; a contact plate, 38, to press the strip of material against the bar; and bolts, 37, outside of the effective length of the rolling bar to force the contact plate and rolling bar together (See Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to add bolts or any other conventional connecting means, such as toggle clamps to the apparatus of the references as combined to provide the force for securing the contact plate against the roller because McQuiston shows these

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connectors to be effective to maintaining the roller and contact plate together.

Furthermore, it would have been obvious to place the toggle clamps outside of the effective length of the roller so as to allow the film to be inserted without being stopped by the connectors, such as shown by McQuiston.

5. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Akira et al. or Stadtmueller in view of Frederick, Mizutani et al., and Japanese Patent Publication 2003-150093 (Hiroyuki et al.) as applied to claim 3 above, and further in view of Baker (U.S. Patent # 1,186,729). The references show the claimed subject matter except for the convexity on the contact plate.

Baker shows a laminate separating roller 1, with an arc shaped contact plate, 5, having cross section matching the curvature of the roller (Fig. 5). Baker further shows convexities, 6, matching with concave grooves, 7, to further hold the layer being removed (page 1, lines 70-76; page 2, lines 20-33). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the convexities and concave grooves of Baker into the roller and contact plate of the references as combined because Baker shows these elements to prevent the layer being removed from slipping on the roller. Regarding the limitation that the convexity lies in the lengthwise direction, Mizutani et al. shows that a convexity on the inner surface of the contact plate can extend in the lengthwise direction.

Regarding claim 8, the first and second convexities are at different positions in a circumferential direction of the roller.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Osele whose telephone number is 571-272-1235. The examiner can normally be reached on M-F 10:00-6:30.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark A Osele/  
Primary Examiner, Art Unit 1745  
December 3, 2010